## Top 100 Operators: Proved Reserves and Production, Operated vs Owned, 2008

The operator of an oil or gas field is the company responsible for the field's management and day-to-day operation. Operators in the United States are obligated to submit to EIA annual estimates of proved reserves for each field they operate. In 2008, the largest 100 operators (as determined by total operated reserves) accounted for nearly 90 percent of proved oil and natural gas reserves but less than one percent of all operators (which numbered over 14,000, based on data collected by EIA for the 2008 reporting year). The top ten accounted for nearly 60 percent of proved oil reserves and almost half of proved natural gas reserves.

EIA does not provide company-specific operated reserves estimates, as publishing these volumes could compromise proprietary data. Figure 1 and accompanying Tables 1 and 2 show the cumulative operated proved reserves of the top 100 operators arranged in ten groups of ten in descending volumetric order. For comparison purposes, the Tables also include the owned proved reserves estimates and production data that most of these companies submitted to the Securities and Exchange Commission (SEC).<sup>2</sup> While there is some overlap, it is useful to distinguish between the proved reserves a company operates and those it actually owns.

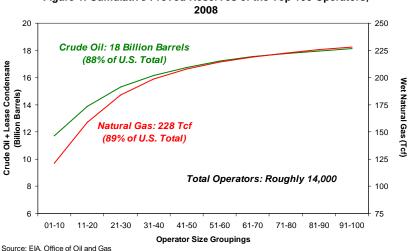


Figure 1. Cumulative Proved Reserves of the Top 100 Operators,

For EIA reporting, a company estimates its *operated* proved reserves on an individual field basis, including 100 percent of each operated field's proved reserves; fields in which it has ownership but does not operate are not included. For filings with the SEC, the company (if publicly-traded) estimates its *owned* proved reserves, which includes only its share of proved reserves; all fields in which it has an ownership are included (cumulatively rather than individually). EIA reporting, therefore, accounts for the entirety of a field's proved reserves and production, while SEC filings include only those volumes owned by companies required to file with the SEC.<sup>3</sup>

For example, ExxonMobil currently holds an approximate one-third interest in the Prudhoe Bay Field in Alaska, the country's largest crude oil field. Because it is not the field's operator,

<sup>&</sup>lt;sup>1</sup> The top 100 operators include both U.S. and foreign companies; their share of total proved reserves is relatively unconcentrated by the standards of many industries.

<sup>&</sup>lt;sup>2</sup> In estimating field-level proved reserves, operators add lease condensate to crude oil (as liquids) and plant liquids to natural gas (as "wet" natural gas). EIA's annual reserves summary combines lease condensate and plant liquids, and reports those volumes separately as natural gas liquids (NGL). Starting with the 2009 reporting year, the annual reserves summary and ranking reports will treat NGL reserves similarly.

<sup>3</sup> The SEC requires companies with most than \$\frac{1}{2} \text{Q} \text{VIII}.

<sup>&</sup>lt;sup>3</sup> The SEC requires companies with more than \$10 million in assets whose securities are held by more than 500 owners to file annual and other periodic reports. For 2008, this requirement applied to 61 of the Top 100 operators ranked by liquids proved reserves and 72 of the Top 100 operators ranked by wet gas proved reserves.

ExxonMobil does not report its proved reserves or production to EIA. For its filing with the SEC, however, the company would include its one-third share of Prudhoe Bay's total proved reserves and production. Operator BP's EIA submission, on the other hand, would include all of the field's proved reserves and production, while its SEC filing would be limited to its ownership share.

For EIA and SEC purposes, proved reserves are defined as those volumes of oil and natural gas that geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Table 1. Top Operators Ranked by 2008 Liquids Proved Reserves (Million Barrels)

(Million Barrels) Operated (EIA) Owned (SEC)				
Rank Company Name		Production		<u> </u>
1 BP PLC	110001100	271.4	2,990.0	191.0
2 OCCIDENTAL PETROLEUM CORP	11,730.1	95.8	154.7	96.0
3 CHEVRON CORP		137.7	1,470.0	154.0
4 CONOCOPHILLIPS CO		123.7	1,928.0	157.0
5 APACHE CORP		39.8	514.8	35.1
6 SHELL OIL CO		95.6	347.0	69.0
7 ANADARKO PETROLEUM CORP		46.1	692.0	54.0
8 AERA ENERGY LLC		61.9		
9 EXXONMOBIL CORP		36.1	1,644.0	104.0
10 PIONEER NATURAL RESOURCES USA INC		8.9	448.9	15.1
11 XTO ENERGY INC		24.6	343.3	26.2
12 AMERADA HESS CORP		19.3	227.0	15.0
13 MERIT ENERGY CO		15.5		
14 CITATION OIL & GAS CORP		10.8		
15 DENBURY RESOURCES INC	0.457.4	13.1	179.1	11.5
16 E O G RESOURCES INC	2,157.1	21.4	205.8	20.0
17 PLAINS EXPLORATION & PRODUCTION CO		20.3	177.7	20.3
18 WHITING PETROLEUM CORP		13.6	180.0	12.5
19 ENCORE ACQUISITION CO		13.6	134.5	10.1
20 NOBLE ENERGY INC		16.8	198.0	18.0
21 C O G OPERATING LLC		8.0	86.3	4.6
22 CHESAPEAKE ENERGY CORP		14.5	120.6	11.2
23 CONTINENTAL RESOURCES INC		12.0	106.2	9.1
24 NEWFIELD EXPLORATION CO		10.7	110.8	7.0
25 MARATHON OIL CO	4 420 6	16.2	178.0	23.0
26 DEVON ENERGY CORP	1,438.6	18.5	484.0	41.0
27 BERRY PETROLEUM CO		8.0	125.3	7.4
28 KINDER MORGAN ENERGY PARTNERS		20.6	85.4	15.0
29 SANDRIDGE ENERGY INC		7.8	43.2	2.3
30 BHP BILLITON		7.2	207.5	16.3
31 LINN ENERGY LLC		7.2	134.9	5.4
32 CITY OF LONG BEACH		10.4		
33 HILCORP ENERGY CO		9.5		
34 ENERGEN RESOURCES CORP		4.9	91.0	5.8
35 RESOLUTE NATURAL RESOURCES CO	818.4	3.5		
36 ARENA RESOURCES INC	0.0.1	3.3	55.8	2.0
37 SHERIDAN PRODUCTION CO LLC		2.9		
38 ENCANA OIL & GAS INC		5.4	51.6	4.9
39 ENDEAVOR ENERGY RESOURCES LP		5.8		
40 FOREST OIL CORP		6.1	100.3	6.9
41 ENI PETROLEUM CO INC		13.9	95.5	15.4
42 SWIFT ENERGY CO		8.2	67.7	6.6
43 RANGE RESOURCES CORP		4.1	73.3	4.5
44 ST MARY LAND & EXPLORATION CO		7.2	51.4	6.6
45 MURPHY OIL CORP	587.0	5.8	26.8	3.9
46 MARINER ENERGY INC		4.8	69.3	6.4
47 STEPHENS & JOHNSON OPERATING CO		1.7		
48 E & B NATURAL RESOURCES MGMT CORP		1.3		
49 CIMAREX ENERGY CO		10.5	44.5	8.4
50 BASA RESOURCES INC		3.5		

Table 1. Top Operators Ranked by 2008 Liquids Proved Reserves (Million Barrels)

	(iniiiii)	=	Operated (EIA)		Owned (SEC)	
Rank	Company Name		Production			
51	VENOCO INC		3.1	58.2	4.1	
52	A T P OIL & GAS CORPORATION		5.9	39.8	4.2	
53	TEXAS PETROLEUM INVESTMENT CO		3.3			
54	NATIONAL FUEL GAS		3.3	46.2	3.1	
55	STONE ENERGY CORP	166.1	11.6	36.6	4.9	
56	PETROBRAS AMERICA INC	466.4	0.4	126.2	5.7	
57	ENERGY XXI GOM LLC		6.9	30.9	4.1	
58	QUESTAR CORP		3.8	31.6	3.3	
59	CALDIVE INTERNATIONAL INC		2.9	32.0	2.8	
60	WALTER OIL & GAS CORP		3.5			
61	W & T OFFSHORE INC		6.4	43.9	7.0	
	DCOR LLC		3.2			
	BASS ENTERPRISES PRODUCTION CO		3.1			
	ULTRA PETROLEUM INC		1.4	27.0	1.1	
	EL PASO ENERGY		6.4	28.1	6.4	
	ANKOR ENERGY LLC	343.2	2.3	20.1	0.4	
	ENERPLUS RESOURCES USA CORP		4.7	19.1	3.4	
	GREKA OIL & GAS INC			19.1	3.4	
	SAMSON RESOURCES CO		0.5 6.3			
				00.0	2.2	
-	EXCO RESOURCES INC		3.1	20.8	2.2	
	TEXLAND PETROLEUM LP		2.1			
	MACPHERSON OIL CO		1.4	04.0	0.4	
	ENERGY PARTNERS LTD		2.1	21.6	2.1	
	ENERVEST OPERATING LLC		2.0			
	BREITBURN OPERATING LP	234.5	4.0	25.9	3.1	
	VESS OIL CORP		1.7			
	PETRO HUNT LLC		2.9			
	WAPITI ENERGY LLC		0.9			
	MCMORAN OIL & GAS LLC		4.7	17.0	3.6	
	FASKEN OIL & RANCH LTD		2.1			
81	JETTA OPERATING CO INC		1.6			
82	LEGACY RESERVES OPERATING LP		1.9	20.9	2.0	
83	HELIS OIL & GAS CO LLC		3.2			
84	HUNT OIL CO		3.2			
85	ENERQUEST OIL & GAS LTD	187.7	0.7			
86	LLOG EXPLORATION CO		1.6			
87	MARBOB ENERGY CORP		3.2			
88	PETRO - CANADA RESOURCES USA INC		1.9	12.0	1.0	
89	PARALLEL PETROLEUM CORP		0.7	21.2	1.0	
90	GULFPORT ENERGY CORP		1.8	21.8	1.6	
91	CRIMSON RESOURCE MANAGEMENT CORP		1.2	6.0	1.0	
92	L C X ENERGY LLC		1.5			
93	EAST RESOURCES INC		1.3			
94	KERNS OIL & GAS INC		0.2			
95	WOLVERINE GAS & OIL CORP	100.4	2.1			
96	FINLEY RESOURCES INC	160.4	1.0			
	TIDELANDS OIL PRODUCTION CO		2.7			
	COMSTOCK RESOURCES INC		1.3	9.7	1.0	
	CRUSADER ENERGY II LLC		0.8		• •	
	TEXCAL ENERGY (GP) LLC		1.5			
	Total	18,123.3	1,469.0	14,940.5	1,291.3	
	Percentage of U.S. Total	88%	80%	73%	70%	
	Operated Form FIA 22 Owned SEC Forms 40	JU /0	0070	1070	10/0	

Operated: Form EIA-23. Owned: SEC Forms 10-K, 20-F, and 40-F.

Notes: Operated reserves are the sum of ten companies. Liquids includes crude oil and lease condensate.

Table 2. Top Operators Ranked by 2008 Natural Gas Proved Reserves (Billion Cubic Feet)

(Billion (	Subic Feet)	-1 /FIA\	O	(050)	
Rank Company Name		Operated (EIA)		Owned (SEC) Reserves Production	
	Reserves				
1 BP PLC		960.8	14,532.0	834.0	
2 CHESAPEAKE ENERGY CORP		1,081.3	11,327.5	775.4	
3 XTO ENERGY INC		953.8	11,802.9	697.4	
4 CONOCOPHILLIPS CO		1,260.6	10,920.0	896.0	
5 DEVON ENERGY CORP	121,372.7	974.6	8,369.0	726.0	
6 EXXONMOBIL CORP		546.0	11,778.0	555.0	
7 ANADARKO PETROLEUM CORP		1,054.8	8,150.0	750.0	
8 ENCANA OIL & GAS INC		768.7	5,831.0	598.0	
9 E O G RESOURCES INC		593.5	4,889.0	436.0	
10 THE WILLIAMS COMPANIES INC		520.5	4,339.0	406.0	
11 QUESTAR CORP		310.3	2,028.5	151.9	
12 ULTRA PETROLEUM INC		166.9	3,355.8	138.6	
13 OCCIDENTAL PETROLEUM CORP		335.0	3,153.0	215.0	
14 PIONEER NATURAL RESOURCES USA INC		228.6	2,917.0	154.3	
15 APACHE CORP	37,520.9	361.6	2,537.2	248.8	
16 CHEVRON CORP	01,020.0	629.2	3,150.0	549.0	
17 SHELL OIL CO		506.0	2,392.0	382.0	
18 EQUITABLE RESOURCES INC		130.6	3,097.3	90.0	
19 SANDRIDGE ENERGY INC		166.9	1,899.6	87.4	
20 SOUTHWESTERN ENERGY PRODUCTION CO	)	266.9	2,175.5	192.3	
21 EL PASO ENERGY		319.6	2,091.0	230.0	
22 NEWFIELD EXPLORATION CO		243.8	2,109.8	167.9	
23 NOBLE ENERGY INC		195.1	1,859.0	145.0	
24 FOREST OIL CORP		195.6	1,719.6	118.1	
25 EXCO RESOURCES INC	25.064.0	190.1	1,815.1	131.2	
26 HIGHMOUNT EXPLOR & PROD TEXAS LLC	25,064.0	117.8	1,694.0	79.0	
27 CABOT OIL & GAS CORP		110.5	1,886.0	90.4	
28 RANGE RESOURCES CORP		130.2	2,213.5	114.3	
29 PETROHAWK OPERATING CO		159.8	1,334.7	102.3	
30 SAMSON RESOURCES CO		303.8	1,00		
31 QUICKSILVER RESOURCES INC		79.3	1,306.5	45.1	
32 ENERGEN RESOURCES CORP		112.8	1,038.5	67.6	
33 C N X GAS CO LLC		86.7	1,422.0	76.6	
34 CIMAREX ENERGY CO		164.5	834.5	12.7	
35 LINN ENERGY LLC		88.9	851.2	45.2	
36 MARATHON OIL CO	14,574.3	213.0	1,085.0	164.0	
37 MERIT ENERGY CO		111.6	1,000.0	104.0	
38 DOMINION RESOURCES INC		61.1	1,099.0	59.0	
39 ANTERO RESOURCES CORP		36.8	1,000.0	00.0	
40 BILL BARRETT CORP		103.4	784.3	73.6	
41 PENN VIRGINIA CORP		65.0	754.1	41.5	
42 J - W OPERATING CO		75.5	7.54.1	41.5	
43 DELTA PETROLEUM CORP		20.1	827.7	19.0	
44 CONTANGO OPERATORS INC		45.9		19.0	
45 BERRY PETROLEUM CO		45.9 44.8	291.6		
	9,102.3		724.1	25.6	
46 HILCORP ENERGY CO		83.0	EE0 0	70.0	
47 MARINER ENERGY INC		115.3	558.0	79.8	
48 COMSTOCK RESOURCES INC		67.9	523.6	53.9	
49 DTE ENERGY		23.2	167.0	6.5	
50 FIDELITY EXPLORATION & PROD CO		69.5	604.3	65.5	

Table 2. Top Operators Ranked by 2008 Natural Gas Proved Reserves (Billion Cubic Feet)

	(Ellion et	Operated (EIA)		Owned (SEC)	
Rank	Company Name		Production		
51	UNIT CORP		69.5	450.1	47.5
52	ENERVEST OPERATING LLC	6,408.6	51.9		
53	BREITBURN OPERATING LP		30.2	466.4	22.4
54	CONTINENTAL RESOURCES INC		29.6	318.1	17.2
55	ST MARY LAND & EXPLORATION CO		76.2	557.4	74.9
56	CALDIVE INTERNATIONAL INC		32.1	424.7	42.2
57	DENBURY RESOURCES INC		46.1	428.0	32.7
58	NFR ENERGY LLC		11.5		
59	AMERADA HESS CORP		62.9	276.0	34.0
60	C O G OPERATING LLC		22.2	305.9	15.0
61	CARRIZO OIL & GAS INC		32.0	392.7	23.6
	MEWBOURNE OIL CO		60.4		
	WHITING PETROLEUM CORP		46.9	354.8	30.4
	LAREDO PETROLEUM INC		12.2		
	PLAINS EXPLORATION & PRODUCTION CO		61.7	686.4	79.3
	GOODRICH PETROLEUM CORP	4,872.9	22.5	390.4	23.2
	PETROLEUM DEVELOPMENT CORP		52.7	662.9	31.8
	ENERGY CORP OF AMERICA		19.0	002.0	00
	LEWIS PETRO PROPERTIES INC		24.0		
	KAISER - FRANCIS OIL CO		49.4		
	SWIFT ENERGY CO		27.5	292.4	20.5
	ATLAS ENERGY RESOURCES LLC		31.1	990.8	33.9
	STONE ENERGY CORP		69.4	299.6	34.4
	ROSETTA RESOURCES INC		56.2	376.0	48.0
	RED WILLOW PRODUCTION CO		59.1	370.0	40.0
	G M X RESOURCES INC	3,804.9	9.3	435.3	11.8
	BASS ENTERPRISES PRODUCTION CO		39.9	400.0	11.0
	ENI PETROLEUM CO INC		90.9	690.1	94.0
	SMITH PRODUCTION INC		23.7	030.1	34.0
	VENOCO INC		31.3	236.2	23.1
	PHILLIPS RESOURCES INC		17.6	230.2	23.1
	A T P OIL & GAS CORPORATION		25.9	210.8	16.8
	GEOMET OPERATING CO INC		7.3	210.0	10.0
	HUNT OIL CO		67.3		
	APPROACH RESOURCES INC		13.0	172.9	7.1
	WALTER OIL & GAS CORP	2,961.4	57.1	172.9	7.1
	MCMORAN OIL & GAS LLC		92.1	242.9	67.9
	W & T OFFSHORE INC		61.3	242.9	56.1
	LLOG EXPLORATION CO		26.5	221.9	30.1
	ENDEAVOR ENERGY RESOURCES LP		21.8		
	BELDEN & BLAKE CORP		9.6	199.8	13.2
				199.0	13.2
	YATES PETROLEUM CORP		97.2		
	AERA ENERGY LLC		19.1		
	VALENCE OPERATING CO G H K CO		46.6 15.6		
		2,336.8	15.6		
	ENDURING RESOURCES LLC		17.3		
	MILAGRO EXPLORATION LLC		44.5		
	ERSKINE ENERGY LLC		9.2	205.0	00.0
	NATIONAL FUEL GAS		17.1	225.9	22.3
100	SOUTHERN BAY OPERATING LLC	000 040 7	15.9	34.8	3.0
	Total	228,018.7	17,384.6	158,587.7	11,833.2
	Percentage of U.S. Total	89%	81%	62%	55%

Operated: Form EIA-23. Owned: SEC Forms 10-K, 20-F, and 40-F.

Notes: Operated reserves are the sum of ten companies. Total Natural Gas, Wet after Lease Separation.